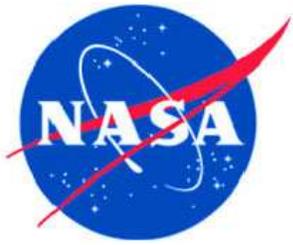




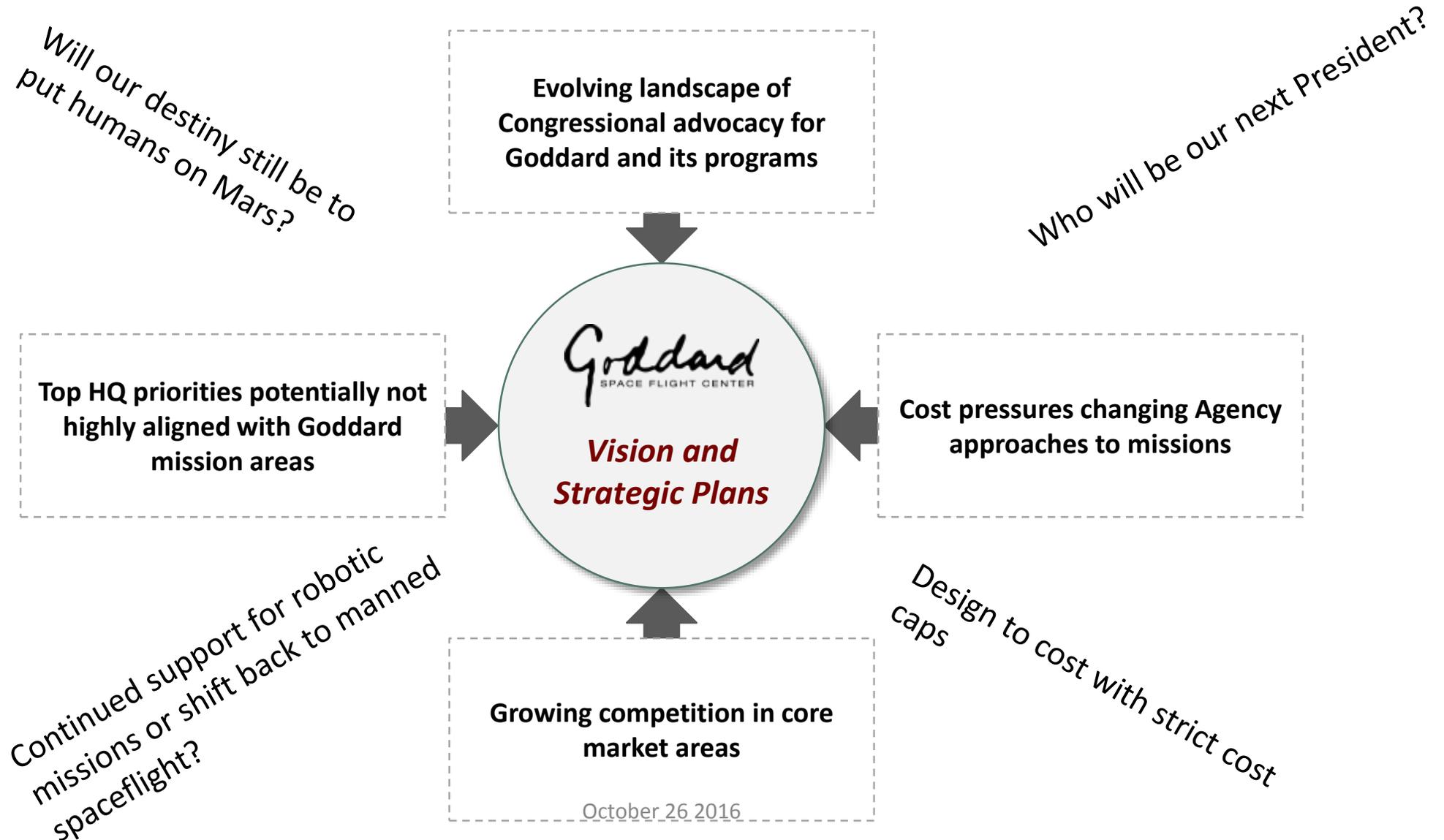
New Business...New Work...New Partners?

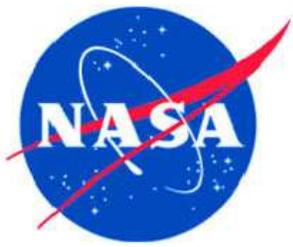
Bill Cutlip
Senior Business Development Manager
New Opportunities Office, Code 101

October 26 2016

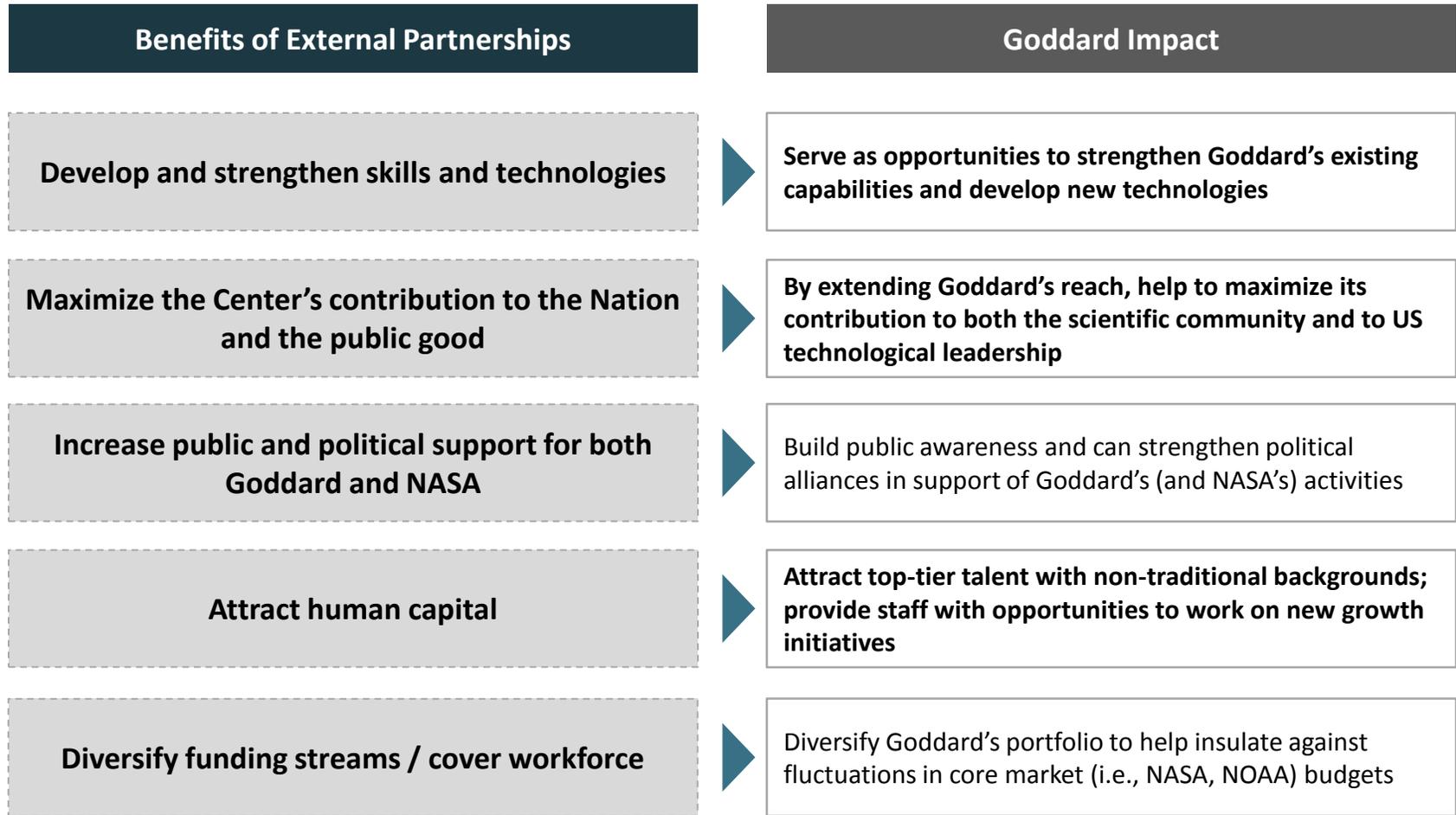


Adapt to trends in the market and stakeholder environment affecting the Center



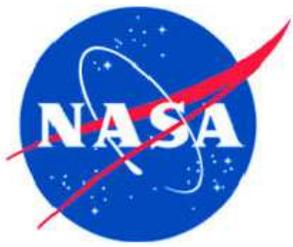


External partnerships serve multiple purposes – supporting Center strategy in several ways

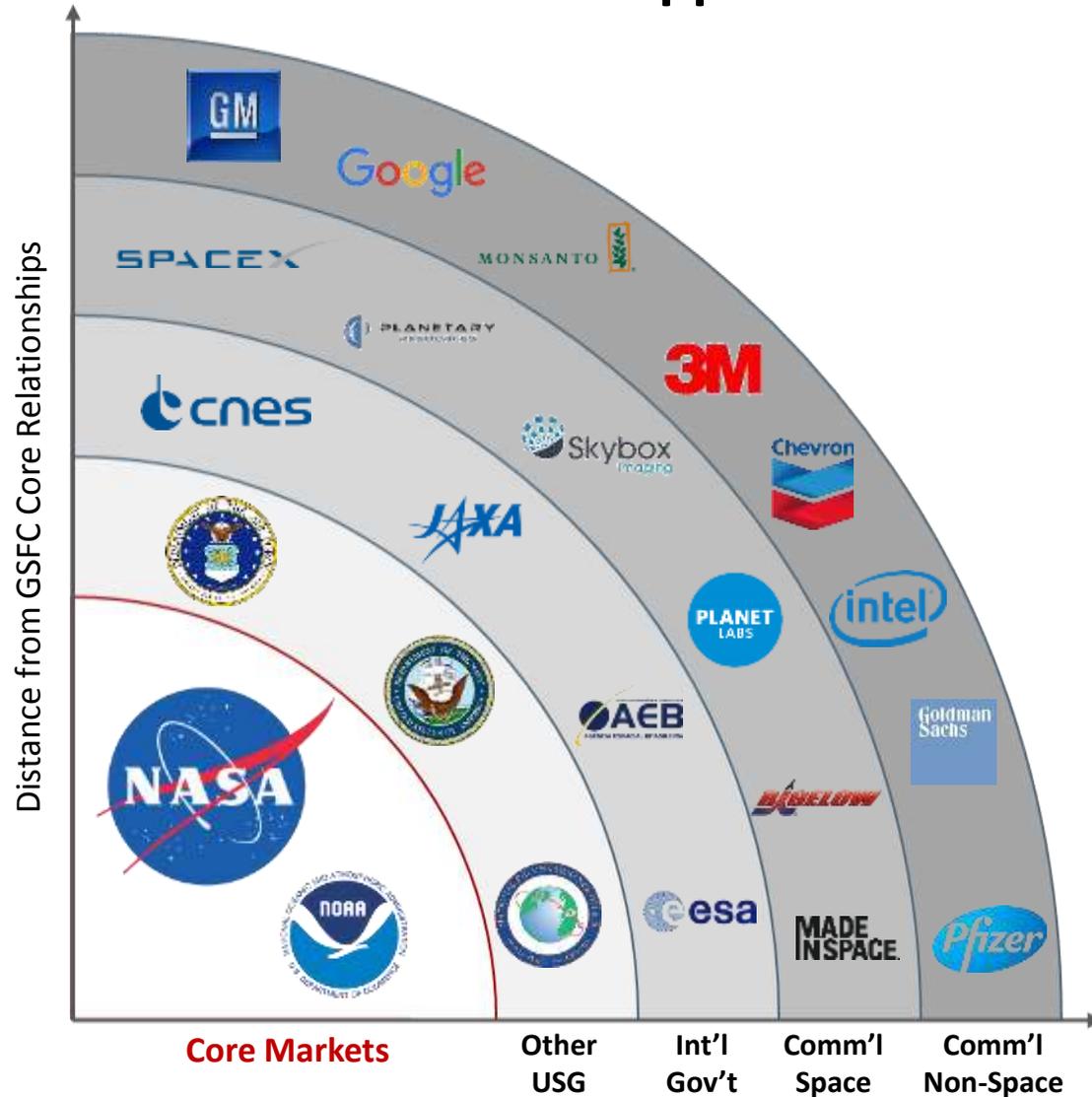


Sub today, Partner tomorrow?

“Step Functions” in measurement capabilities!



Develop a balanced, sustainable portfolio of external partnerships that support our mission and strategy



Core Markets

Other USG

Int'l Gov't

Comm'l Space

Comm'l Non-Space

Four Partner Groups

(Example entities shown)

Portfolio Approach to Partnerships

SHIFTING EXTERNAL ENVIRONMENT

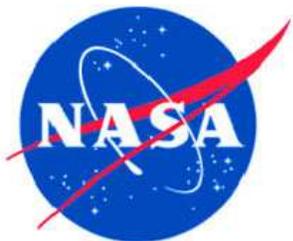


EVOLVING GODDARD VISION AND STRATEGY

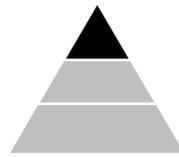
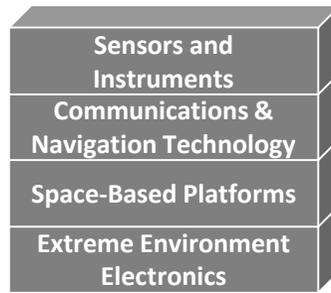
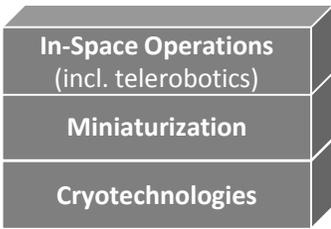
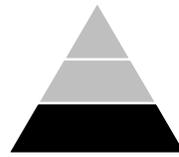


EXTERNAL PARTNERING PORTFOLIO

Prioritizing efforts between these four groups (and selecting targets within them) is an important mechanism for helping Goddard accomplish its goals



Goddard's core capabilities form the foundation of any partnerships

Capability Type	Example GSFC Capabilities		Partnership Attractiveness
 <p>Technologies</p>			<ul style="list-style-type: none"> • Likely to be higher-value arrangements • Best opportunities for developing new technologies
 <p>Infrastructure</p>		<p><i>(Capabilities consolidated for clarity)</i></p>	<ul style="list-style-type: none"> • Maintain capabilities • Opportunity to develop new relationships
<p>This includes ALL of Goddard!</p>  <p>Disciplines</p>		<p><i>(Capabilities consolidated for clarity)</i></p>	<ul style="list-style-type: none"> • Share knowledge and best practices • May require more creativity or non-reimbursable arrangements



Goddard Space Flight Center - Center Org Chart

Leaders of the New Business Process

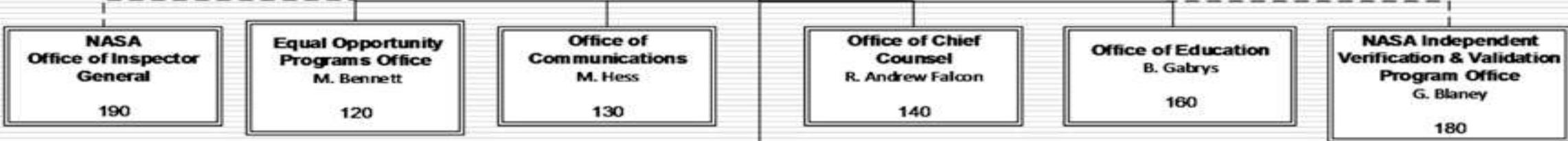
Deputy Director for Technology & Research Investments
Christyl Johnson



Office of the Director
Director – C. Scolese
Deputy Director – G. Morrow
Deputy Director for Technology and Research Investments – C. Johnson
Deputy Director for Science, Operations and Program Performance – Vacant
Associate Director – N. Abell

100

 **New Opportunities Office/101**



Office of Human Capital Management
Director – C. Gayhart (Acting)
Deputy – F. Smith (Acting)

110

Office of Chief Financial Officer
Director – J. Baker
Deputy – F. Ramos

150



Cost Estimating, Modeling & Analysis/158

Management Operations
Director – R. Rubilotta
Deputy – D. Reth

200

Safety & Mission Assurance
Director – J. Bruner
Deputy – R. Barney

300

Flight Projects
Director – D. Mitchell
Deputy Director – T. McCarthy

400



Advanced Concepts & Formulation/401

Applied Engineering & Technology
Director – F. Jones-Selden
Deputy – C. Todey
Deputy – J. Roman

500

Sciences & Exploration
Director – C. Hartman
Deputy – P. Sellers

600

Information Technology & Communications
Director – D. Vandertuig
Deputy – J. Donohue

700

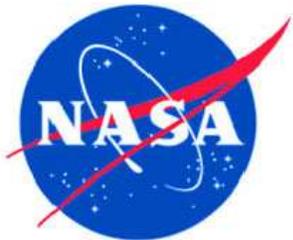
Suborbital & Special Orbital Projects
Director – W. Wrobel
Deputy – D. Pierce

800

EVERY organization has a New Business lead at the Directorate and Division level.

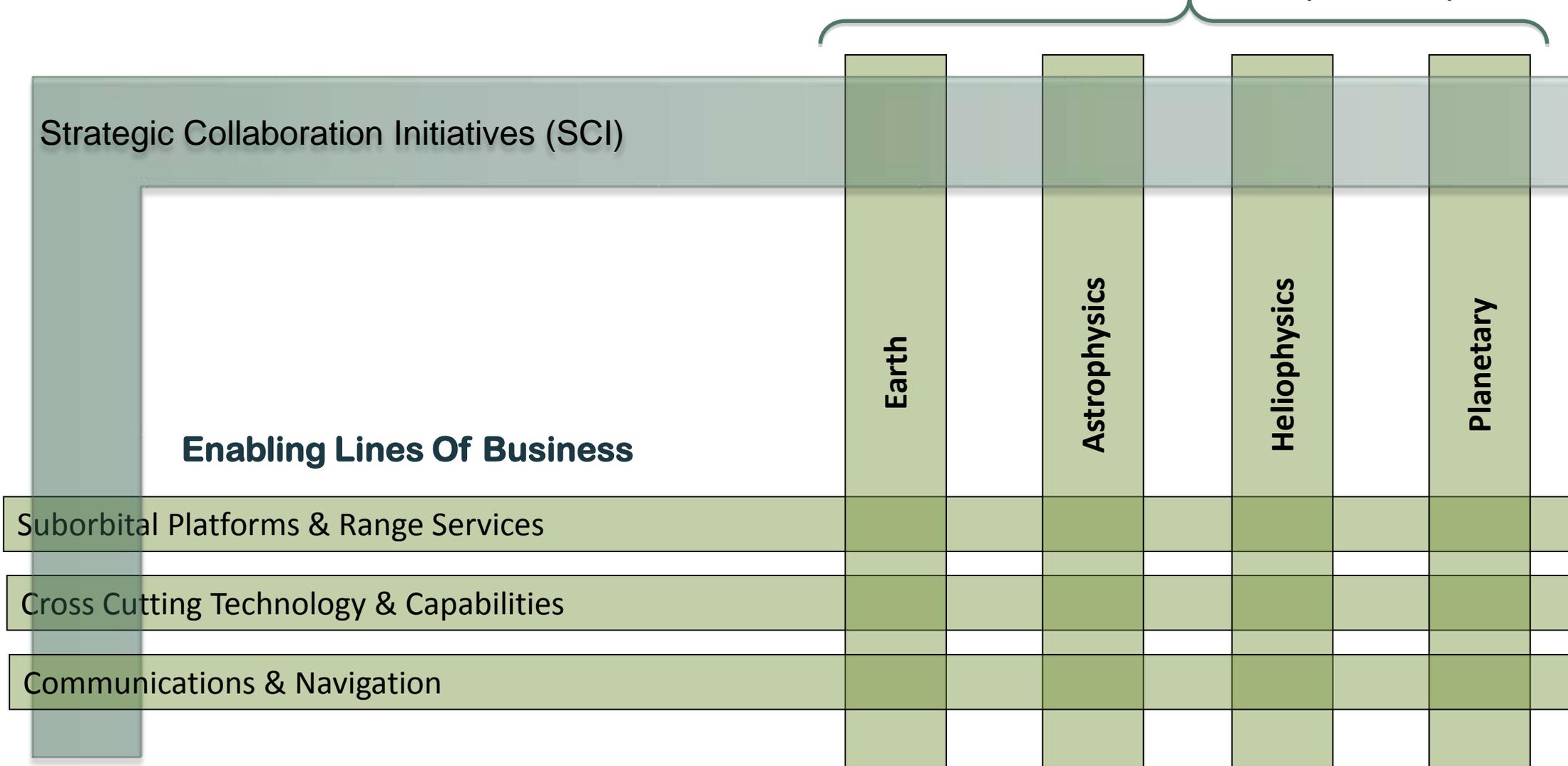
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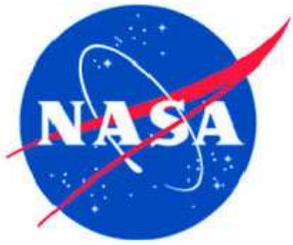
Updated: November 2015



Core and Enabling Lines of Business!

Core Lines Of Business (Science)



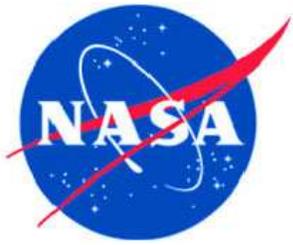


Why Does Goddard Have LOBs?

- **Goddard needed to organize to prioritize and capture new work effectively and efficiently**
 - *Needed a Process for the Formulation for an Integrated Center Strategy for Business Development*
- **Structuring how we manage our work (portfolio) by organizing into Lines Of Business (LOB) was the first step in 2006**
- **Much of the Infrastructure was in place**
- **In May of 2008, we strengthened existing elements to support new business development in the LOBs by:**
 - Creating **LOB Core Teams**, assigning responsibility, and holding them accountable
 - Defining the structure, the resources and communications model
 - Defining a concept of operations (guidance, expectations, deliverables)

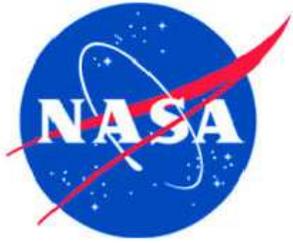
Outcome

Integrated, focused business strategy for each LOB with investment resources aligned to capture new business.



The LOBs Are Accountable For

- **Tracking opportunity forecast**
- **Develop annual strategic objectives (1 to 3 year goals)**
- **Develop and implement 1-year action plan of tangible and measurable tasks and activities traceable to each of the LOB strategic goals which will serve as the focus for LOB operations, reporting and measuring progress**
 - For each goal, the action plan will contain the following:
 - Relevant IRAD elements or needs
 - Concept studies
 - Pre-proposal activities
 - Advocacy (marketing) plan
 - Partnership strategy
- **Manage approved set of resources, including SED Strategic, IRAD portfolio and B&P resources, having the authority to reallocate resources after concurrence with the appropriate responsible official**
- **Provide programmatic oversight of individual capture efforts within the LOB**
- **Report LOB status to NBC on a Monthly basis including hot topics, issues, challenges, key accomplishments, communications with external entities (e.g., HQ, partners, stakeholders, etc**

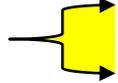


Competitive Opportunities Are Always Partner Friendly

▪ AO (HQ Science Mission Directorate)

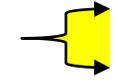
– Earth Science, Heliophysics, Planetary Science, Astrophysics*

Astro
Helio



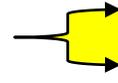
- SMEX - Small Explorers (\$105M + ELV)
- Explorer (\$200M+ELV)

Planetary



- Discovery (\$425M + ELV)
- New Frontiers (\$650M + Launch)
- Earth Venture (\$150M)

Earth

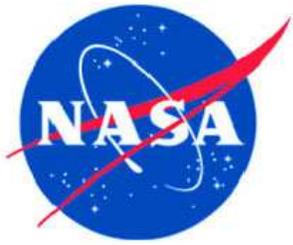


- EVs = **S**uborbital (field campaigns) (\$30M/campaign)
- EVm = Full **M**ission (orbital) (\$150M for a single mission)
- Mission Specific Instruments
 - Mars 2020 (instruments for next rover)
- OCT Broad Agency Announcements (BAA)
 - Technology Demonstration Missions



OCT = Office of the Chief Technologist

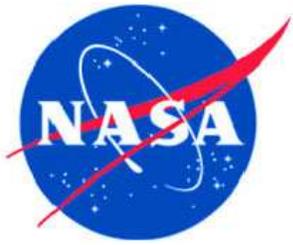
*Competitive aspect of Mars Program is within Planetary Science Division



Directed Work Is Usually RFP Friendly

▪ HQ Science Mission Directorate

- **JWST** (James Webb Space Telescope)
- **JPSS** (Joint Polar Satellite System)
- **HST** (Hubble Space Telescope)
- IXO (International X-ray Observatory)
- LISA (Laser Interferometer Space Antenna)
- STP (Solar Terrestrial Probes)
 - MMS, GEC, MagCon
- LWS (Living With a Star)
 - RBSP (Radiation Belt Storm Probes)
- NPP (NPOESS Preparatory Project)
- GPM (Global Precipitation Measurement)
- ICESat II
- **WFIRST** (Wide-Field Infrared Survey Telescope)
- **PACE** (Plankton, Aerosol, Cloud, ocean Ecosystem)



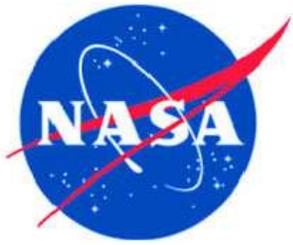
Partnering Opportunity Documents (PODs)

- **Current AO/NRA Headquarters selection process does not satisfy competition requirements for selecting industry partners. NASA's GSFC Principal Investigators (PIs) or at times Co-Is must use separate competitive processes to establish industry partnerships for new hardware/software contracts, unless adequate sole source justification exists.**

- **This Process has been developed to streamline partnership selections and contract awards after NASA's GSFC PI (or Co-I) selection**

- **PODs are the primary approach for all non-science *hardware* partnering**
 - They are specific to a given NASA HQ Announcement of Opportunity (AO) or NASA Research Announcement (NRA)
 - They serve as the basis for a Justification for Other than Fair and Open Competition (JOFOC) for Unusual and Compelling Urgency when awarding a contract to the partner after the proposal is selected for implementation (i.e. the proposal is a Single Step or Step 2 that has “won”)

- **PODs are an Agency accepted, FAR approved procurement approach to partnering**
 - NASA's GSFC Procurement and Legal worked closely with HQ Legal to establish
 - The method to communicate and disseminate the POD is consistent with standard Procurement requirements (“level playing field”)
 - Their use is limited to proposals that are responding to NASA HQ AOs/NRAs

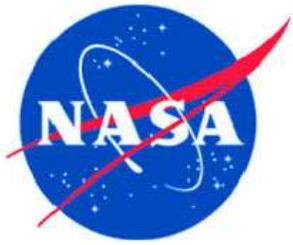


When Do You Use A POD?

- **You must be responding to a NASA HQ AO/NRA**
- **PODs will be developed in terms of opportunities; i.e. Discovery AO, EV1, SMEX, MIDEX, etc.. If the opportunity is delayed, the POD will remain viable for that opportunity.**
- **The hardware needed for the proposal's concept is not "incidental to the science"**
 - In the case where a PI/Co-I is providing a piece of hardware as part of his/her involvement in the proposal's science team, there is no requirement for a POD, as the hardware is deemed "incidental" to the science
- **There is a developmental aspect to the hardware**
 - It is not available - as required - "off the shelf"
 - Example: the spacecraft configuration required is not available under the RSDO contract, thus you issue a POD for your spacecraft

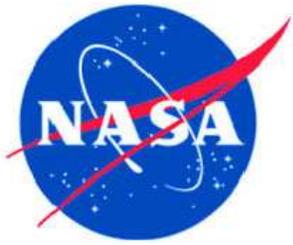
Note:

Partner(s) selected will be investing their own Bid & Proposal (B&P) funds in the proposal effort



When Not to Use a POD?

- **If you are just looking for possible sources of support (vendors)**
 - Work with Procurement to issue a Request For Information (RFI)
- **If you are just looking for a ROM cost quote on a piece of hardware**
 - Work with Procurement to issue a Request For Quote (RFQ)
- **If you are looking for partners on a study report that has no stated (or obvious) linkage to a future AO**
 - Contact Carl Stahle (Code 500)) about existing partnering mechanisms
- **The hardware is “incidental” to the science**
- **The Principal Investigator (PI/Col) has a vested interest in partnering with a specific company**
 - “We’re the Government and we can’t play favorites”
 - Contact Procurement Steve Lloyd, AA for Space Sciences and Nipa Shah, AA for Earth Sciences about formulating a Justification for Other than Full and Open Competition (JOFOC) if you have a long term relationship already established
- **If you are responding to any solicitation other than an AO**
 - Contact Carl Stahle about existing partnering mechanisms



Conclusion

- ***Capturing New Work is unlike any other activity at Goddard, yet it depends on many of the things we've always been very good at***
 - Directed and Competitive work both depend on the *right mix* of science, technical expertise, management (cost & schedule), and partners
 - Strong partners are developed over time and over multiple opportunities
 - It is essential to Goddard's long-term "mission success"

- ***Goddard is successful in the proposal and capture arenas because we have an outstanding mix of science (ideas!), engineering, management, external partners and a new business process that supports them.***



Come Talk With Us!

New Opportunities Office		
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Bill Cutlip (Earth Science)	301-286-0438	william.e.cutlip@nasa.gov
Mike Amato (Planetary)	301-286-3914	michael.j.amato@nasa.gov
Julie Crooke/Tim Beach (Astrophysics)	301-286-7255	julie.a.crooke@nasa.gov
Tim Gehringer (Heliophysics)	301-286-6831	timothy.c.gehringer@nasa.gov
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Terry Doiron (Instrument Systems and Technology Division)	301-286-8898	terence.a.doiron@nasa.gov
Bob LeBair (Electrical Engineering Division)	301-286-2542	robert.s.lebair@nasa.gov
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Doug Rabin (Heliophysics Science Division, Deputy Director)	301-286-5682	douglas.rabin@nasa.gov
Danny Glavin (Solar System Exploration Division, Associate Director For Strategic Science)	301-286-6738	daniel.glavin@nasa.gov